

Brief introduction to Fermicloud

Here is a summary of the main commands you may use with Fermicloud.

You can find more on the Fermicloud project site:

https://cdcv.s.fnal.gov/redmine/projects/fcl/wiki/OpenNebula4_New_User_Quick_Start_Tutorial

youruser in this document refers to your Fermilab username (in the Kerberos realm).

1. Access to `fermicloudui.fnal.gov` to start using Fermicloud

```
~$ ssh youruser@fermicloudui.fnal.gov
```

Note: `fermicloudui.fnal.gov` is an RRDNS pair that points to `fcluigpvm01.fnal.gov` and `fcluigpvm02.fnal.gov` both of which users can log into also directly.

2. To display all the Virtual Machines (VMs) that you own, use `onevm list`

```
~$ onevm list
```

You should see something like:

```
-bash-4.1$ onevm list
```

ID	USER	GROUP	NAME	STAT	UCPU	UMEM	HOST	TIME
42878	youruser	users	youruserGWMStest	runn	0	1.9G	fc1009	1d 05h55
42885	youruser	users	LLPFactorytest	runn	93	1.9G	fc1116	0d 00h02
42886	youruser	users	LLPFrontEndtest	runn	103	1.9G	fc1411	0d 00h01

3. To see all the images (templates) that you can use to create the machine

```
~$ onetemplate list
```

You should see something like:

```
-bash-4.1$ onetemplate list
```

ID	USER	GROUP	NAME	REGTIME
----	------	-------	------	---------

```

50 oneadmin oneadmin SLF6                11/26 16:16:25
56 oneadmin oneadmin SLF5                12/11 10:18:27
131 oneadmin oneadmin SLF5 32bit         06/06 12:58:08
132 oneadmin oneadmin SLF6 32bit         06/06 12:59:54
211 oneadmin oneadmin SLF6x IB x64      12/05 17:40:10
220 oneadmin oneadmin SLF6x Vanilla     01/13 13:11:16
-bash-4.1$

```

Important note: All the templates which contain “Home” in the name, beside the OS and basic users will also include all the remote users from NIS (gfactory, your_user, frontend...). These remote users are coming from a configuration in a server managed by puppet. These will make it easier to login and to share data across all the VMs, but may sometimes interfere with your local system. Consider using local users only.

4. To create a Virtual Machine

```

:~$ onetemplate instantiate --name <name_of_the_machine> <template_name>

```

You should see something like:

```

-bash-4.1$ onetemplate instantiate "SLF6x Vanilla" --name "my test VM"
VM ID: 6598
-bash-4.1$ onevm list

```

ID	USER	GROUP	NAME	STAT	CPU	MEM	HOSTNAME	TIME
6598	youruser	users	my test VM	runn	2	2G	fc1412 00	01:40:03

Now you can ssh the machine with your username (if your template has also the remote users) or as root. To ssh you need the IP or the hostname of your VM. This is included in the information printed by "onevm show".

To see the IP or the hostname of all your VMs you can use a command like:

```

:~$ onevm list | grep $USER | awk '{ print $1 }' | xargs -n1 onevm show | grep ETH0_IP | \
cut -d\" -f2 | xargs -n1 host

```

5. To delete a machine

```

:~$ onevm delete <SID >

```

You should see something like:

```
-bash-4.1$ onevm delete 6598
```

```
Are you really sure you want to delete this VM? Type a Capital Y
```

```
Y
```

```
You seem sure, we proceed
```

```
-bash-4.1$ onevm list | grep 6598
```

```
-bash-4.1$
```